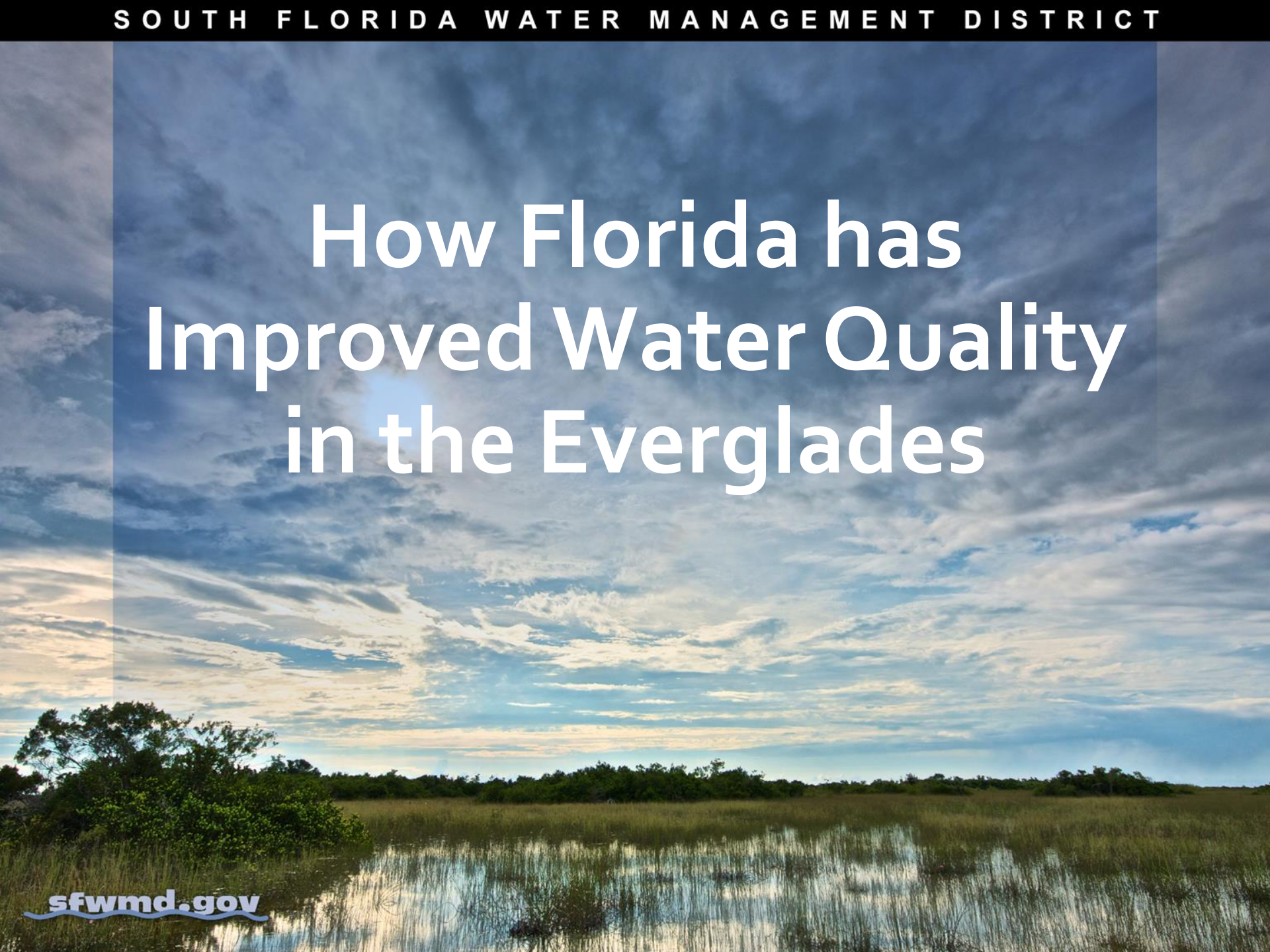
How Florida has Improved Water Quality in the Everglades



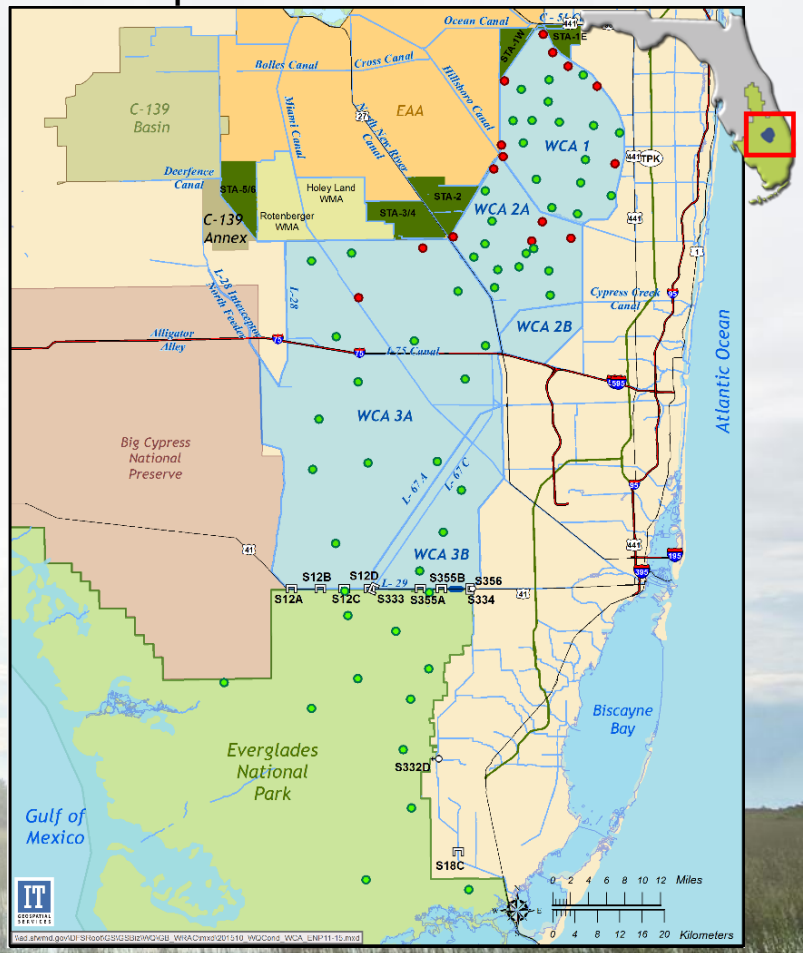
A Rare Jewel of Nature

- America's Everglades ecosystem covers 11,000 square miles
- The Everglades is bigger than the state of Massachusetts and 1.5 times the size of the Grand Canyon

Water Quality Goal within Reach

- This year, **90 percent** of the Everglades is at 10 parts per billion of total phosphorus or lower
- The water gets cleaner as it moves south from Lake Okeechobee through treatment areas – the way the system is designed to work

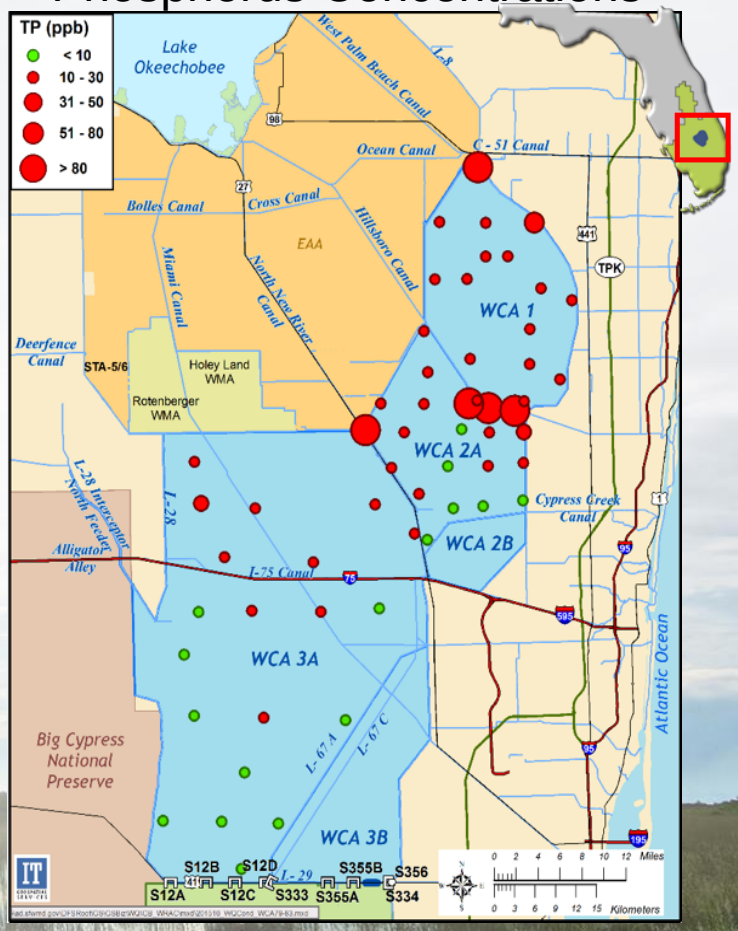
2011-2015
Phosphorus Concentrations



An Ecosystem in Jeopardy

- Phosphorus comes into the Everglades from nutrients and stormwater runoff
- Small amounts of phosphorus can cause excessive algae and non-native plant growth
- In the 1980s, levels of phosphorus in parts of the Everglades were higher than 150 parts per billion

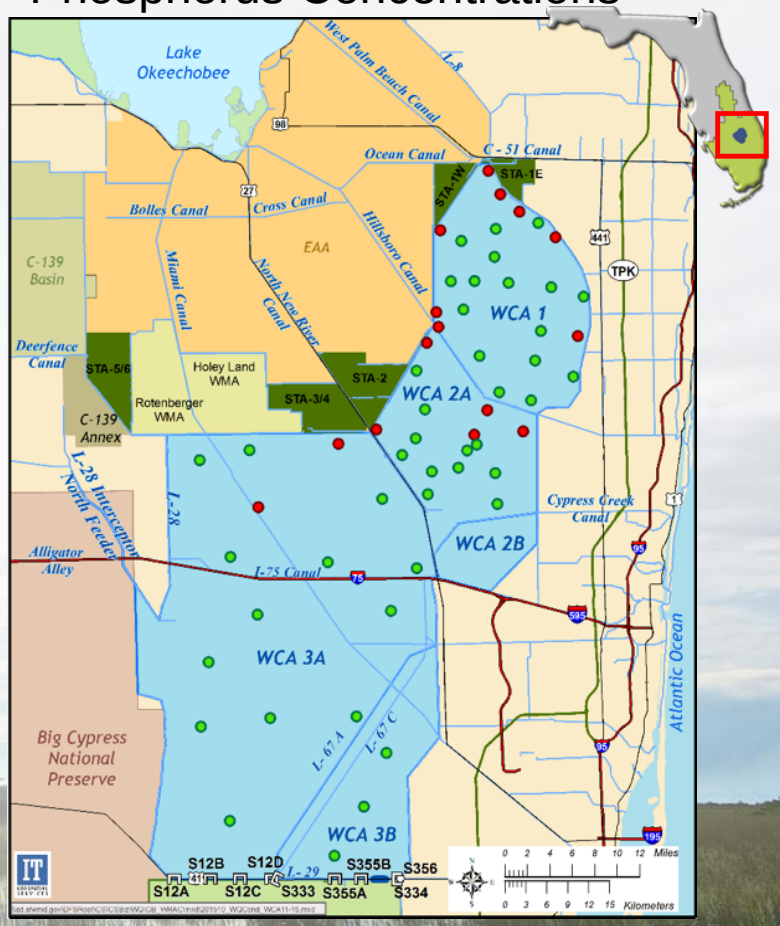
1979-1983
Phosphorus Concentrations



Significant Progress Made

- Everglades water is cleaner than it has been in generations
- Historically high concentrations of phosphorus in Water Conservation Areas are now low

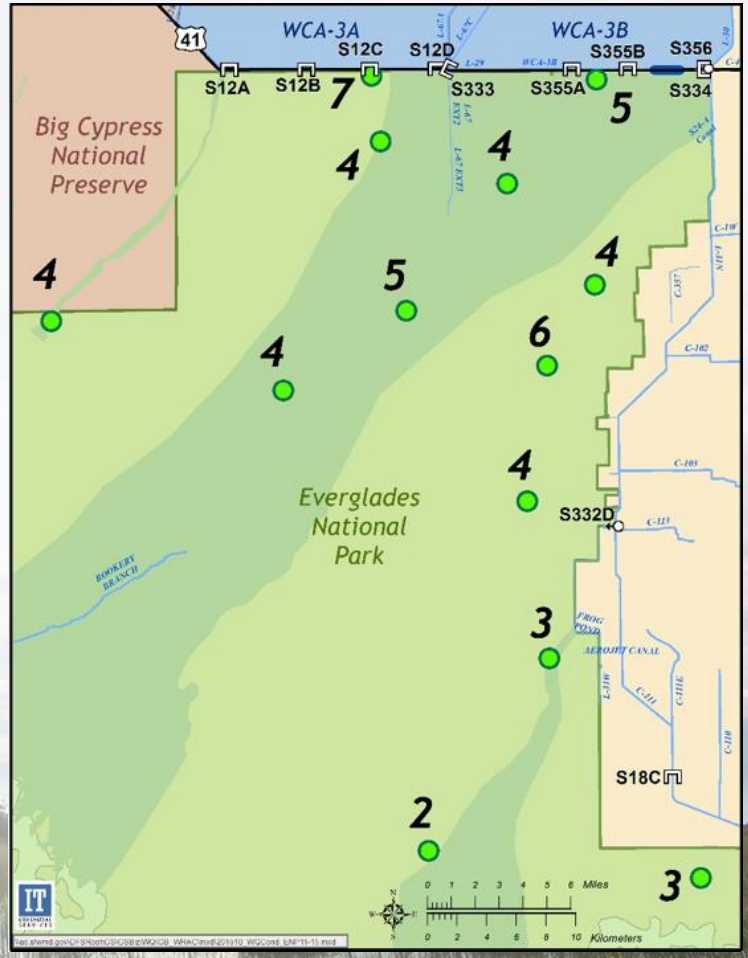
2011-2015
Phosphorus Concentrations



The System is Working

- Water comes into treatment with high concentrations of phosphorus
- Water reaches Everglades National Park with low concentrations of phosphorus

2011-2015 Phosphorus Levels



Tons of Phosphorus Removed

- Water quality efforts have removed approximately 5,000 metric tons of phosphorus
- All of this phosphorus could have ended up in the Everglades, causing excessive algae and plant growth

How Florida Did It

- Invested $1.8 billion to improve water quality
- Worked with ag community to control phosphorus at the source
- Built massive wetland areas to clean water

Controlling it at the source

- Farming Best Management Practices (BMPs) curb phosphorus runoff
- Phosphorus runoff from farming decreased average of 56 percent each year
- 3,000 metric tons of phosphorus prevented from flowing to the Everglades

Stormwater Treatment

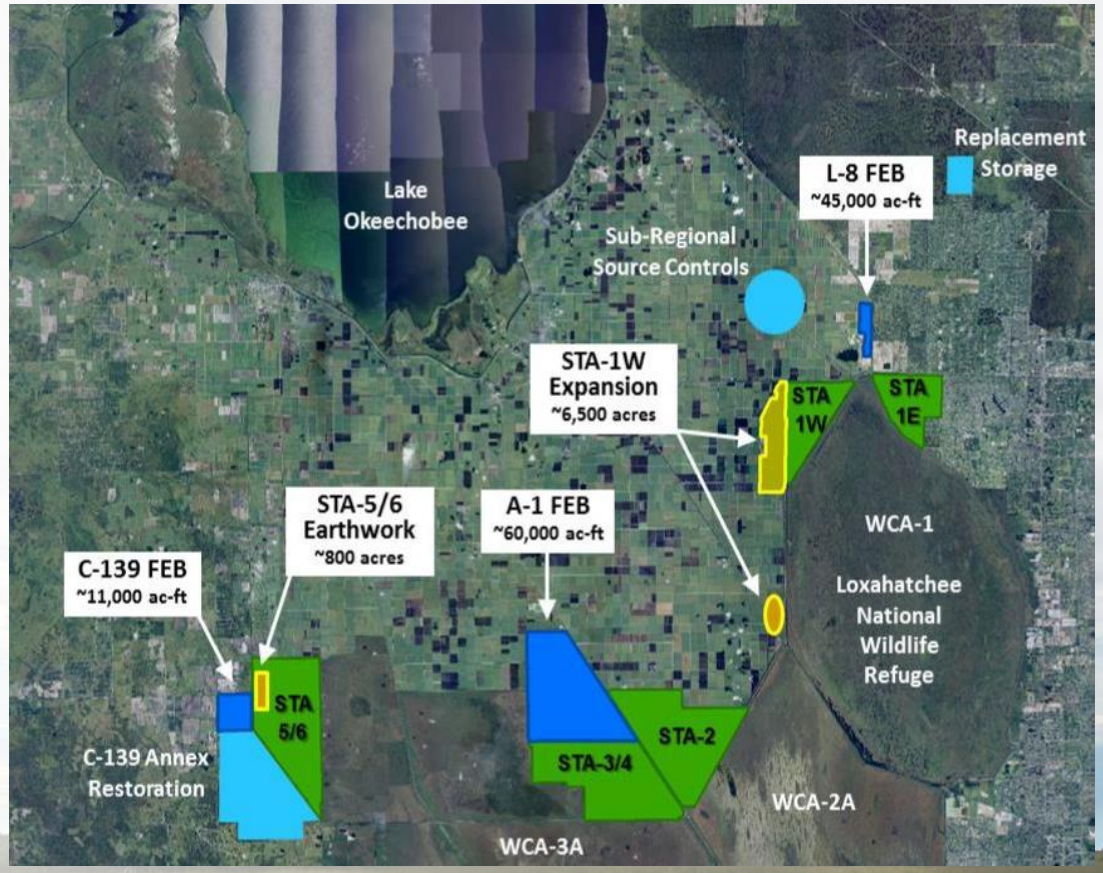
- Florida built 57,000 acres of Stormwater Treatment Areas (STAs)
- Water is cleaned in treatment areas before release to the Everglades

Millions of gallons treated

- 16 million acre-feet of water treated by STAs
- 2,012 tons of phosphorus removed through treatment

More work to be done

- Future water quality projects include 6,500 more acres of STAs
- Florida also creating 116,000 more acre-feet of water storage

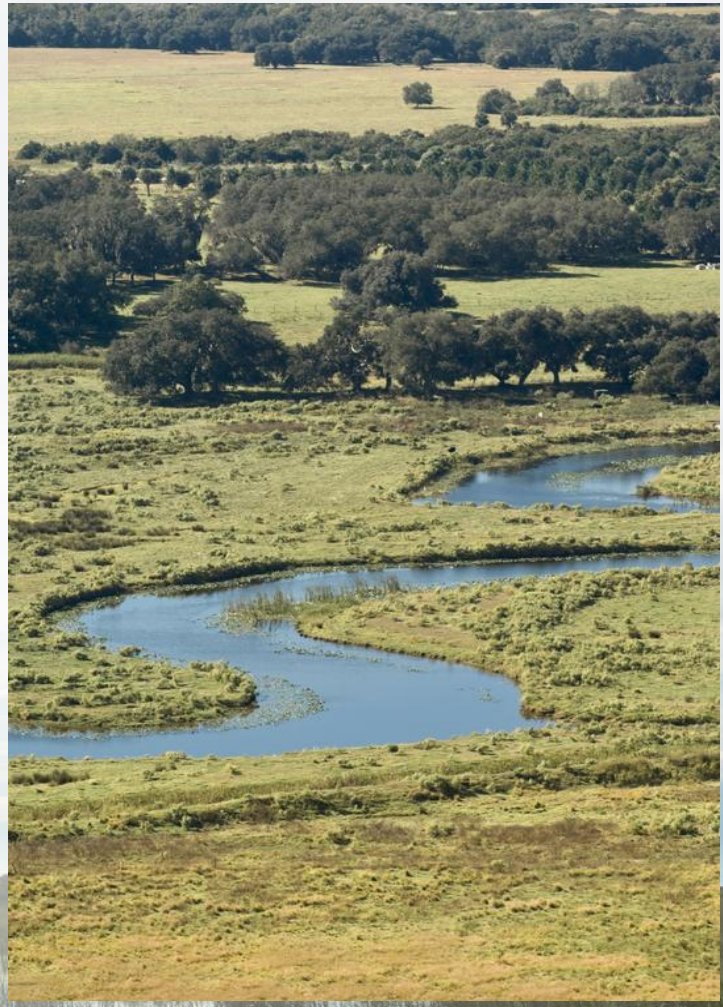


Optimizing system performance

- Flow equalization basins allow storing of stormwater
- Controlling the flow of stormwater improves the ability of treatment areas to remove phosphorus

Northern Everglades & Estuaries

- Water and phosphorus inflow into Lake Okeechobee primarily comes from the north
- Projects identified in Basin Management Action Plans will improve quality of water flowing into the Lake
- Treatment and storage projects underway for St. Lucie and Caloosahatchee estuaries




Questions?
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